



**ARMY CYBER
INSTITUTE**
AT WEST POINT

Voice/Data NVIS Field Testing

Army Cyber Institute



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A laptop is open on a car seat, displaying a software interface for a radio setup. The interface shows a frequency of 3.578 000 MHz and a time of 18:51:24 on 2010 Dec 13. It includes a spectrum display and various control buttons. The laptop is connected to an Elecraft KX3 transceiver and a KXPA100 amplifier, which are also connected to a power source. The setup is located inside a vehicle, with the car seat and dashboard visible in the background.



Activities js8call Thu 10:51 JS8Call DE KN4CRD (v0.10.1-devel)

File Configurations Decode Save Log View Control Help

80m AAM2P 3.578 000 18:51:17 2018 Dec 13 1921 Hz

RX TX TUNE LOG SPOT ACTIVE AUTO SELCALL

Offset	Age	SNR	Message(s)
1917	(now)	+09	KJ5HY: AAM2P TEST 1 10W 5.112MHZ ~

18:39:51 - (1940) - AAM2P: KJ5HY STANDING BY FOR GUIDANCE ~

18:48:11 - (1938) - AAM2P: KJ5HY TEST 1 10W 5.112MHZ ~

18:50:29 - (1917) - KJ5HY: AAM2P TEST 1 10W 5.112MHZ ~

Type your outgoing directed message to KJ5HY here.

Callsign	✓	Age	SNR	Offset
@ALLCALL (1)				
* KJ5HY		(45s)	+09	1917

HB CQ Reply SNR QTH QTC Saved Directed to KJ5HY ~ Deselect Send Halt

CAT 80 60 40 20 0 28 dB

800 1000 1200 1400 1600 1800 2000

18:51:00 80m

18:50:45 80m

18:50:30 80m

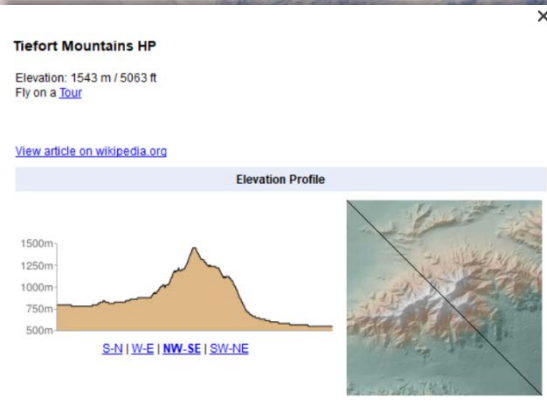
QSY Bins/Pixel 2 Start 500 Hz Palette Adjust... ✓ Flatten Ref Spec Spec 0 % Cumulative Smooth 1

Center 1500 Hz Offset 1921 Hz N Avg 1 Default

Receiving JS8 Last Tx: 12MHz 2/15



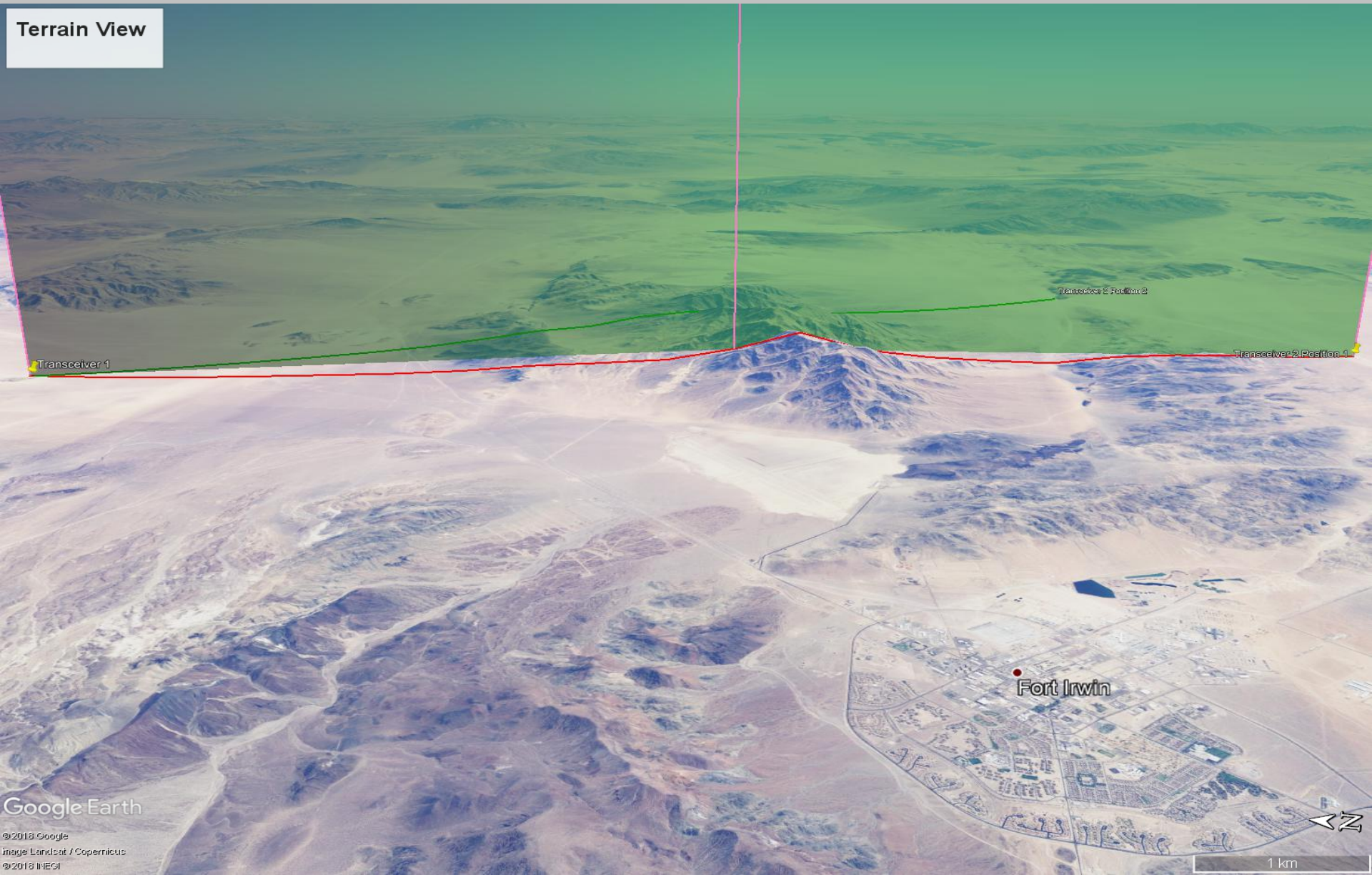
NVIS Overview





Voice/Data NVIS Field Testing

Terrain View



Google Earth

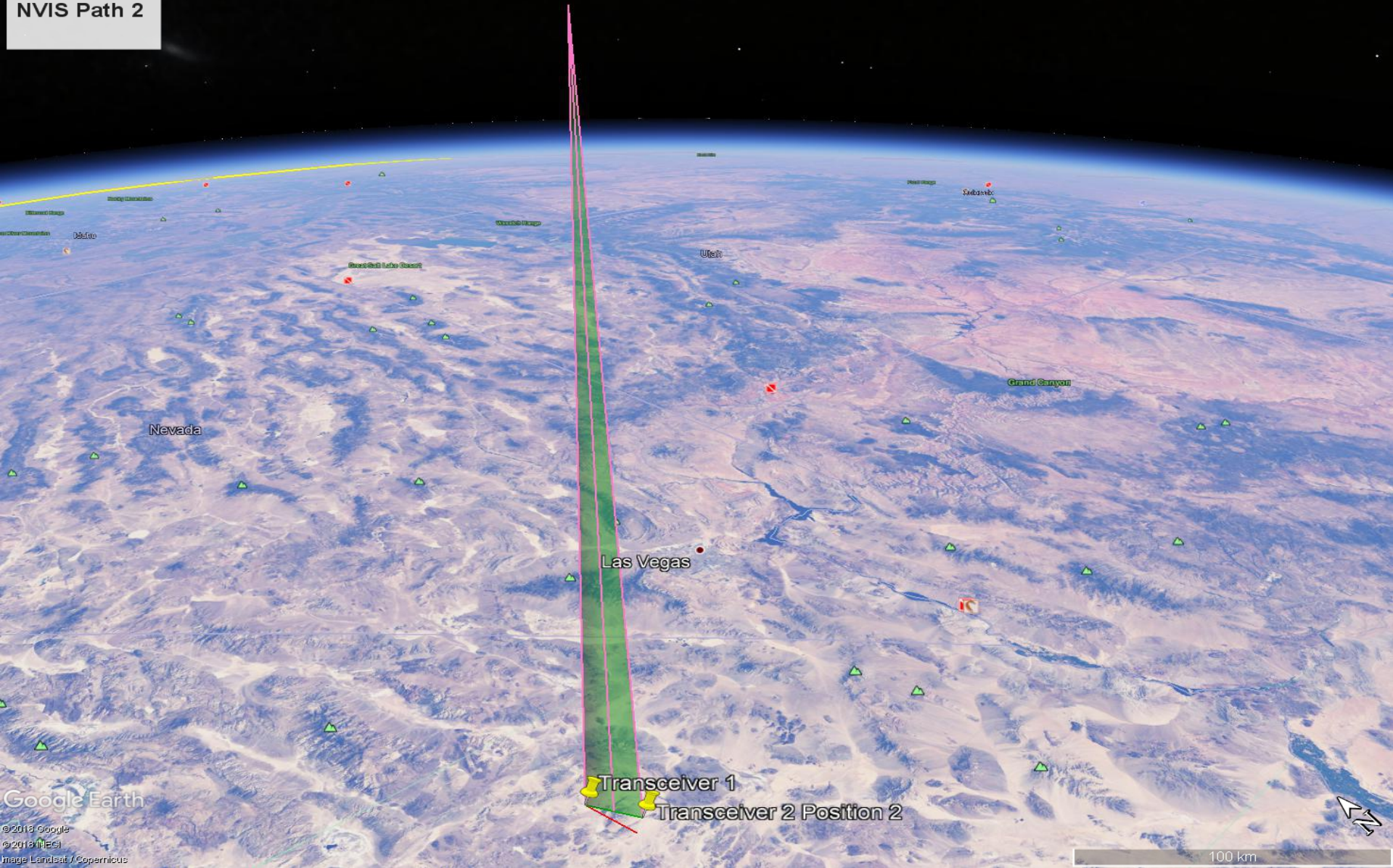
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Image Landsat / Copernicus
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Fort Irwin

1 km



NVIS Path 2





SETTINGS

<i>Bands</i>	RED SIDE		BLACK SIDE	
	<i>Wire length</i>	<i>Tap</i>	<i>Wire length</i>	<i>Tap</i>
80 METERS	28'	No	29'	No
60 METERS	12'	Tap 37	15'	No
40 METERS	14'	Tap 16	17.5'	Tap 20

